PROTOCOL FOR INSURING EXACTLY ONCE SEMANTICS OF TRANSACTIONS ACROSS AND UNORDERED, UNRELIABLE NETWORK

ABSTRACT OF THE DISCLOSURE

The present invention implements a mechanism for reliably communicating transaction messages between source and destination devices connected across an unreliable network, where a transaction is an operation requested by a source device of a destination device and where a plurality of messages are exchanged between source and destination in order to ensure completion of the transaction. Because the network linking the source and destination is unreliable, the source and destination operate to preserve data regarding the transaction messages which they have received and transmitted. If responsive messages are not timely received, they are generally resent. A dual timing system is preferably implemented to ensure that there are never two identical messages simultaneously in transmission through the network.

3/1/00

809273.1